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PATENT COOPERATION TREATY

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Commissioner
 US Department of Commerce
 United States Patent and Trademark
 Office, PCT
 2011 South Clark Place Room
 CP2/5C24
 Arlington, VA 22202
 ETATS-UNIS D'AMERIQUE
 in its capacity as elected Office

Date of mailing (day/month/year) 20 June 2001 (20.06.01)	
International application No. PCT/GB00/03418	Applicant's or agent's file reference GW-8213-GB
International filing date (day/month/year) 06 September 2000 (06.09.00)	Priority date (day/month/year) 09 September 1999 (09.09.99)
Applicant SYKES, John	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:
 26 March 2001 (26.03.01)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was
☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	Authorized officer Olivia TEFY Telephone No.: (41-22) 338.83.38
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PCT COOPERATION TREATY

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NOTICE INFORMING THE APPLICANT OF THE
COMMUNICATION OF THE INTERNATIONAL
APPLICATION TO THE DESIGNATED OFFICES

(PCT Rule 47.1(c), first sentence)

From the INTERNATIONAL BUREAU

To:

BAILEY WALSH & CO.
5 York Place
Leeds LS1 2SD
ROYAUME-UNI

PGB

Date of mailing (day/month/year) 15 March 2001 (15.03.01)		IMPORTANT NOTICE	
Applicant's or agent's file reference GW-8212-GB 8547			
International application No. PCT/GB00/03418	International filing date (day/month/year) 06 September 2000 (06.09.00)	Priority date (day/month/year) 09 September 1999 (09.09.99)	
Applicant SYKES, John			

1. Notice is hereby given that the International Bureau has communicated, as provided in Article 30, the international application to the following designated Offices on the date indicated above as the date of mailing of this Notice:
AU, KP, KR, US

In accordance with Rule 47.1(c), third sentence, those Offices will accept the present Notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

2. The following designated Offices have waived the requirement for such a communication at this time:
AE, AG, AL, AM, AP, AT, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EA, EE, EP, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OA, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU.
The communication will be made to those Offices only upon their request. Furthermore, those Offices do not require the applicant to furnish a copy of the international application (Rule 49.1(a-bis)).
3. Enclosed with this Notice is a copy of the international application as published by the International Bureau on 15 March 2001 (15.03.01) under No. WO 01/18318

REMINDER REGARDING CHAPTER II (Article 31(2)(a) and Rule 54.2)

If the applicant wishes to postpone entry into the national phase until 30 months (or later in some Offices) from the priority date, a demand for international preliminary examination must be filed with the competent International Preliminary Examining Authority before the expiration of 18 months from the priority date.

It is the applicant's sole responsibility to monitor the 18-month time limit.

Note that only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination.

REMINDER REGARDING ENTRY INTO THE NATIONAL PHASE (Article 22 or 39(1))

If the applicant wishes to proceed with the international application in the national phase, he must, within 20 months or 30 months, or later in some Offices, perform the acts referred to therein before each designated or elected Office.

For further important information on the time limits and acts to be performed for entering the national phase, see the Annex to Form PCT/IB/301 (Notification of Receipt of Record Copy) and Volume II of the PCT Applicant's Guide.

26 MAR 2001

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 28, Switzerland	Authorized officer J. Zahra
Facsimile No. (41-22) 740.14.35	Telephone No. (41-22) 338.83.38
Form PCT/IB/308 (July 1998)	

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PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference GW-8213-GB	FOR FURTHER ACTION		see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.
International application No. PCT/GB 00/ 03418	International filing date (day/month/year) 06/09/2000	(Earliest) Priority Date (day/month/year) 09/09/1999	
Applicant THE OLD VICARAGE			

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing:

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☐ as suggested by the applicant.

☒ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

1
☐ None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No

P B 00/03418

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 E03D13/00 G09F27/00 A47K17/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A47K E03D G09F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 298 11 821 U (THIERLING JENS) 17 September 1998 (1998-09-17)	1-3, 6, 11-13, 17, 20-22
Y	the whole document	4, 5, 7-10, 14, 15
Y	US 4 773 863 A (DOUGLAS III LOUIS R) 27 September 1988 (1988-09-27) the whole document	4, 5, 14, 15
Y	DE 197 26 413 A (KUSSMAUL FRIEDHELM) 7 January 1999 (1999-01-07) the whole document	7-10
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

10 November 2000

Date of mailing of the international search report

20/11/2000

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
 NL - 2280 HV Rijswijk
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
 Fax: (+31-70) 340-3016

Authorized officer

Gallo, G

INTERNATIONAL SEARCH REPORT

International Application No

P B 00/03418

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X	WO 00 03099 A (SYKES JOHN) 20 January 2000 (2000-01-20) cited in the application the whole document ----	1-22
P, X	DATABASE WPI Section PQ, Week 200035 Derwent Publications Ltd., London, GB; Class P28, AN 2000-404417 XP002152507 & JP 2000 139777 A (TOTO LTD), 23 May 2000 (2000-05-23) abstract -----	1-3, 10-13, 20, 21
A	FR 2 703 499 A (ROBINE BRUNO) 7 October 1994 (1994-10-07) -----	

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB 00/03418

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 29811821 U	17-09-1998	DE 29815011 U	22-10-1998
US 4773863 A	27-09-1988	GB 2223164 A, B	04-04-1990
DE 19726413 A	07-01-1999	NONE	
WO 0003099 A	20-01-2000	AU 4525999 A	01-02-2000
JP 2000139777 A	23-05-2000	NONE	
FR 2703499 A	07-10-1994	NONE	

PCT

REC'D 07 NOV 2001

WIPO PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference GW-SAR-8457-PCT	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/GB00/03418	International filing date (day/month/year) 06/09/2000	Priority date (day/month/year) 09/09/1999
International Patent Classification (IPC) or national classification and IPC E03D13/00		
Applicant SYKES, John		



1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 8 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

 These annexes consist of a total of 20 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☒ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☒ Certain documents cited
- VII ☒ Certain defects in the international application
- VIII ☒ Certain observations on the international application

Date of submission of the demand 26/03/2001	Date of completion of this report 05.11.2001
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer Leher, V Telephone No. +49 89 2399 7352 

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/GB00/03418

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, pages:

1-14 as received on 10/10/2001 with letter of 08/10/2001

Claims, No.:

1-20 as received on 10/10/2001 with letter of 08/10/2001

Drawings, sheets:

1/3-3/3 as received on 10/10/2001 with letter of 08/10/2001

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application; the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/GB00/03418

☐ the drawings, sheets:

5. ☒ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

see separate sheet

6. Additional observations, if necessary:

III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application.

☒ claims Nos. 6,7.

because:

☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (*specify*):

☒ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 6,7 are so unclear that no meaningful opinion could be formed (*specify*):
see separate sheet

☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.

☐ no international search report has been established for the said claims Nos. .

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

☐ the written form has not been furnished or does not comply with the standard.

☐ the computer readable form has not been furnished or does not comply with the standard.

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N) Yes: Claims 4, 5, 11-15, 17, 18, 20

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/GB00/03418

	No:	Claims	1-3, 8-10, 16, 19
Inventive step (IS)	Yes:	Claims	11-15, 17, 20
	No:	Claims	1-5, 8-10, 16, 18, 19
Industrial applicability (IA)	Yes:	Claims	1-20
	No:	Claims	

2. Citations and explanations
see separate sheet

VI. Certain documents cited

1. Certain published documents (Rule 70.10)

and / or

2. Non-written disclosures (Rule 70.9)

see separate sheet

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:
see separate sheet

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:
see separate sheet

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB00/03418

Re Item I

Basis of the report

1. Independent claim 1:

1.1 The amendments filed with the letter dated 08. Oct. 2001 introduce subject-matter which extends beyond the content of the application as filed, contrary to Article 34(2)(b) PCT. The amendments concerned are the following:

The feature

- (A) "A toilet or urinal facility" has been omitted,
- (B) "data is retrievable from said memory means on site" has been added,
- (C) "data is transmittable ... to **the memory means** at a remote location" has been added.

1.2 Concerning feature (A):

This feature is presented as essential in the disclosure of the invention. The deletion of this feature requires modification of other features to compensate for this deletion, and introduces subject-matter which extends beyond the content of the application as filed, contrary to Article 34(2)(b) PCT.

1.3 Concerning features (B) and (C):

These added features are neither explicitly nor implicitly stated in the original application.

1.4 Remark:

Assuming that modifications of claim 1 would be allowable

- an apparatus according to the modified claim 1 would not be novel in view of any common computer, or in view of the device described in D3 (=DE-A-19726413).
- claim 1 as well as dependent claims 11, 12, 16 would be unclear, since some features relate to the "facility", which would not be part of the claimed subject-matter.

2. For examination purposes the wording of claim 1 will be as follows:

*A toilet or urinal facility, wherein said facility includes
a screen for the display of video material, which screen is positioned so as to be
viewed by a person when using the facility
a sensor provided to detect the presence of a person using the facility and/or at
least one fixture in the facility,
and characterised in that
memory means are provided to allow the storage of data generated from the
sensor to indicate the presence of a person or persons in the facility and/or fixture
and said data is transmittable via transmission means to a remote location, for*

subsequent display, processing and/or analysis, to provide a record of the exposure of persons to the displayed material.

Re Item III

Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

Claims 6, 7:

The additional technical features relate to *"video/audio data, material to be displayed"*, which is not part of the claimed subject matter.

Re Item V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Independent Claim 1, Lack of Novelty

1.1 Document D5 (=EP-A-0396039; this document was not cited in the international search report. A copy of the document is appended hereto) is considered to represent the most relevant state of the art.

1.2 D5 discloses a

toilet or urinal facility (see original application, p. 2, l. 1 "*sink*"), wherein said facility includes a screen 4 for the display of video material (s. col. 3, l. 7, 8, 13, etc.), which screen is positioned so as to be viewed by a person when using the facility (s. fig. 1a)

a sensor 5 provided to detect the presence of a person using the facility and/or at least one fixture in the facility (s. col. 3, l. 4-6; *when the hands are detected by the photoelectric cells, the presence of a person using the fixture is detected*),

whereby

memory means 2 are provided to allow the storage of data generated from the sensor to indicate the presence of a person or persons in the facility and/or fixture (s. col. 3, l. 45,46; claim 7, 8)

and said data is transmittable via transmission means (e.g. *a piece of paper and a pencil*) to a remote location, for subsequent display, processing and/or analysis, to provide a record of the exposure of persons to the displayed material.

1.3 Thus, the combination of features of independent claim 1 is disclosed by the device described in D5. Therefore, the subject-matter of claim 1 is not new (Article 33 (2) PCT).

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB00/03418

1.4 Remark concerning the combination of features

"... and said data is transmittable via transmission means to a remote location, for subsequent display, processing and/or analysis, to provide a record of the exposure of persons to the displayed material."

This combination of features does not concern the claimed subject-matter. On the contrary, it relates to the feature "data" which is not part of the claimed subject-matter, the reasons being the following:

According to the feature

"...memory means are provided to allow the storage of data ..."

the claimed subject-matter contains memory means, which allow the storage of data. The storage of data is the function of the memory means. Therefore the stored data itself is not part of the claimed subject-matter.

2. Dependent claims 2-20

2.1 Dependent claims 2-5, 8-10, 16, 18, 19 do not appear to contain any additional features which, in combination with the features of any claim to which they refer, are either new or involve an inventive step with respect to the prior art named in the present proceedings.

The reasons therefor are that the additional features of the said claims are

- either directly known from document **D5** (claims 2, 3, 8-10, 16, 19),
- or are a combination of features obvious to the man skilled in the art in consideration of the disclosure of the prior art named in the present proceedings, or they concern only minor modifications which lie within the normal practice of the man skilled in the art (claims 4, 5, 18).

2.2 The combinations of the features of dependent claims 11, 12, 13, 14, 15, 17, 20 are neither known from, nor rendered obvious by, the available prior art.

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB00/03418

Re Item VI

Certain documents cited

Certain published documents (Rule 70.10)

Application No Patent No	Publication date (day/month/year)	Filing date (day/month/year)	Priority date (<i>valid claim</i>) (day/month/year)
PCT/GB99/02064	20.01.2000	01.07.1999	24.07.1998
JP19980314727	23.05.2000	05.11.1998	05.11.1998

Re Item VII

Certain defects in the international application

1. Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the document **D5** is not mentioned in the description.
2. The features of the claims are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).
3. The drawings do not meet the requirements of Rule 11.13 PCT.

Re Item VIII

Certain observations on the international application

Lack of Clarity, Article 6 PCT

Claim 11: The feature "*the housing*" was not mentioned previously, and is therefore not clear.

Claims 12: The additional technical feature "*...said sensor activated...*" relates to a method step.

Urinal or Toilet Facility Apparatus

The invention to which this application relates is to a urinal or toilet facility and particularly, although not necessarily exclusively, to fixtures in the same such as a wall mounted urinal fixture or a toilet seat or a sink, mirror or the like with the facility provided in commercial premises such as, for example, service stations, public houses, stadia and non commercial premises such as public conveniences or even domestic premises.

The applicant's co-pending Application No. PCT/GB99/02064 discloses the ability to provide a visual display as part of a urinal fixture. The urinal is provided with a sensor.

The aim of the present invention is to provide for improvements to the urinal or toilet facilities by providing display means and it should be appreciated that the description of toilet or urinal facilities include those facilities which include any or any combination of the fixtures such as urinal facilities for males which can be wall mounted and toilet seat facilities or sinks and the like and in general any fixture by which a person is likely to spend some period of time.

In a first aspect of the invention there is provided a toilet or urinal facility, wherein said facility includes a screen for the display of video data and/or speakers for audio data, which screen is positioned so as to be viewed by a person when using at least one fixture in the facility and a sensor is provided to detect the presence of a person in said facility.

It should be appreciated that the reference to the toilet or urinal facility above and hereonin is used to define a facility which may include male wall mounted urinal fixtures and/or toilet seat fixtures

and/or sinks, hand driers or any other fixture of a urinal or toilet facility and that the inventive features herein described can be used in conjunction with one or a number of said fixtures within the facility and the display screen can be mounted as part of the fixture or separately therefrom and viewable by the person viewing the facility

In one embodiment the facility fixture is a male urinal which is wall mounted and has a collection area leading to a drain and, depending upwardly from the collection area, a wall and wherein said screen is mounted as part of the wall section.

In an alternative embodiment the screen is located at a position removed from the male urinal fixture but viewable to a person using the same. On the occasion of the fixture having a number of bays for a number of users, the same may be provided with a display screen for each bay or, alternatively, a common screen.

In one embodiment the video and/or audio data can be supplied from a video tape/ compact disc or recorded media apparatus located as part of the apparatus or connected to the display screens at a remote location within the premises of the facility or at a location remote from the premises.

In one embodiment the material to be displayed can be updated from a remote location from the facility premises and/or the recording media which can be a video tape, CD or disc can be replaced or updated by the overwriting of data.

In one embodiment the sensor is arranged to detect the presence of a user of the facility or fixture and a means is provided to allow the storage of details indicating the usage of the facility and/or fixture.

In one embodiment the data from the sensor indicates the frequency of persons entering the area in which a fixture with a display screen is provided, and the data can be stored for subsequent analysis in which frequency and times of usage can be analysed.

In one embodiment the sensor is provided as an integral part of the fixture or display screen housing and senses the commencement of use of the fixture. In an alternative embodiment the sensor is provided to react to the presence of a person in the immediate vicinity of the fixture. In a yet further embodiment a proximity switch can be used in which the person using the facility changes the condition of a beam of light hence allowing the detection of the presence of the person.

In addition to the sensor acting as a counting means, it can be used to activate a visual display or other features of the facility and/or a further sensor may be provided to allow the activation of the display or other features of the facility.

In a further aspect of the invention there is provided a urinal or toilet facility provided with at least one fixture for use by a person and wherein there is provided a display screen mounted for viewing by the person when using the fixture.

The provision of the display screen allows information, advertising material or other media to be displayed for viewing by the person when using the fixture.

In one embodiment the display screen condition is activated or the condition is changed in response to the insertion of a coin, token, or card into apparatus in connection with the display screen or by the activation of a sensor.

The user of the urinal may have paid for the activation via coin or token or card or, alternatively, may have been given same as a promotional scheme.

In one embodiment the display is for a game of chance such as a gambling game activated by inserting the coin, token or card, or alternatively, the user may be able to try and win by activating a sensor connected with the urinal and/or display screen.

In a further embodiment, the means for receiving the coin, token or card and/or display screen are provided as integral parts of the fixture.

It is envisaged that, in whatever embodiment, the display apparatus can be powered from a mains supply or alternatively by portable power sources.

In one embodiment the urinal or toilet facility fixture includes a sensor which is provided to indicate a change in condition of the fixture and wherein the sensor is controlled to react to a specified liquid or liquids.

In one embodiment the sensor is provided to change condition upon use of a male urinal or toilet seat and is controlled to react to urine liquid but not water so as to avoid activation during the flushing process.

In one embodiment the sensor used is a conductive sensor and the sensitivity of the same is adjusted to allow the same to react upon contact with some liquids and exclude others in reaction to the particular conductivity of the liquid.

In one embodiment the urinal or toilet facility incorporates a toilet seat fixture, said seat having mounted in the same or in proximity thereto a sensor, said sensor activated by the presence of a person on said seat or in the vicinity of the same.

Typically the toilet seat fixture includes or is provided with a display screen in proximity thereto.

In one embodiment at least one sensor is provided for detecting the presence of a person using the fixture. The sensor can be provided within the toilet seat and react to pressure applied thereon when a person sits on the same so that the sensor can be maintained in the activated state for as long as the person remains on the seat. When the person leaves the seat the pressure on the sensor changes and so the sensor can be used to sense the number of occasions on which the fixture is used in any given time, by utilising appropriate processing apparatus to receive the sensor signals. In another embodiment the sensor is a switch device mounted on the seat to contact with the base of the seat with increased pressure when a person sits on the seat. In yet another embodiment the sensor may be a detector mounted in a position on or removed from the seat and which is positioned so as to detect the presence of a person on the seat. This form of sensor could be a PIR infra red sensor. In yet another embodiment the sensor can be provided to sense the flushing of the fixture, such as by detecting the use of the flush mechanism, or the presence or absence of water in the cistern.

It is envisaged that the sensor will be mounted and provided as part of a system which utilises a screen display, typically positioned to be viewable by a person when sitting on the seat, and said screen can be provided to show advertising material, games or other forms of entertainment. The sensor system can be used to indicate to advertisers the number of persons who are using fixtures in the

facility and therefore likely to view the advertising material, to allow them to gauge the exposure to the advertising material.

In another embodiment, in addition to, or instead of indicating the number of persons using the fixtures, the sensors can be used to activate and deactivate the display of the material being displayed to them.

In one embodiment the screen or sensor or both can be mounted as part of other facility fixtures to the fixture used by the person at that time, such as, for example, being provided as part of a toilet roll holder or in or on a wall or door of the cubicle. Typically audio facilities are also provided to allow the listening of material to occur.

In a further embodiment of the invention the facility incorporates a sink fixture and the sensor is provided to detect the presence of a person at the sink and the screen is positioned to be viewable by a person at the sink. In one embodiment the sensor is provided to detect the use of the water taps of the sink. In addition or alternatively the screen and/or sensor are incorporated in a mirror mounted to be viewable by the person using the sink.

Thus the invention provides a toilet or urinal facility wherein said facility includes a screen for the display of video data and/or speakers for audio data, which screen is positioned so as to be viewed by a person when using a fixture in the facility.

Typically the front display of the screen or a screen enclosing the display screen is made of armoured glass and the securing means for the same can be secured in conjunction with adhesive known as hot glue.

In a yet further aspect of the invention there is provided a toilet or urinal facility, wherein said facility includes at least one fixture for use by a person, and the presence of persons using said fixture is detected by a sensor mounted on the fixture or in a position to detect the presence of a person at said fixture and said sensor data indicative of the persons presence is stored in memory means.

Specific embodiments of the invention will now be described with reference to the accompanying drawings wherein;

Figure 1 illustrates a urinal or toilet facility fixture according to one embodiment of the invention; and

Figure 2 illustrates a urinal or toilet facility fixture according to a further embodiment of the invention.

Figure 3 illustrates a urinal or toilet facility fixture of a yet further embodiment;

Figure 4 illustrates a urinal or toilet facility fixture in a further embodiment; and

Figure 5 illustrates a toilet seat fixture in a further embodiment of the invention.

Referring to Figures 1 and 2 there is illustrated in each embodiment a male urinal fixture 2 according to one embodiment of the invention which includes two bays, 4, 6 each of which has a urinal collection area 11 and which, in the embodiments shown, lead to a common drain 8 for urine. Depending upwardly from the collection areas respectively are walls 10, 12. The fixture is of the sort provided in a urinal or toilet facility within a premises.

In the embodiment of Figure 1, as part of each fixture wall, there is provided a display screen 14,16.

In Figure 2 the screens 15, 17 are not provided as integral parts of the urinal fixture wall but are provided as free mounted units, typically in protective housings 19, but they are still, in the terms of the patent, part of the urinal facility and the fixture in question as they are positioned so as to be viewed by persons when at the urinal bays 4,6. For reasons which will become clear later, the ability for the user of the fixture to view the screens when using the fixture and be sensed to be at the urinal fixture at that time, is an important advantage of the current invention.

In whichever embodiment each screen is provided for the display of video data such as adverts, games and the like. The screens are mounted so as to be viewable by persons using the fixture in the facility and are positioned at a convenient height and may also be angled to allow easy viewing by the user. The display screens are mounted behind a protective front face such as armoured glass, and may be positioned a distance behind the front face so that impact on the front face does not necessarily cause damage to the display screen. Speakers, for example 20, in Figure 2, can also be provided at the same location as the display screens or may be positioned as selected to suit particular facility requirements.

In one embodiment the video and audio data which is generated is done on a continuous basis from a video/compact disc or other storage means apparatus which in one embodiment can be mounted within the urinal facility or may be positioned at a remote location from but connected to the facility. In an alternative arrangement the generation of the video and/or audio material or a change in the video and/or audio material which is generated can be commenced in response to the activation of a sensor system which signifies that

the fixture is being used or that a person has entered the area in which the fixture is mounted and can therefore view the screen when using the fixture.

Figures 1 and 2 illustrate the provision of sensors 18 which are positioned to detect the presence of a person using the fixture. Preferably the sensors are provided to allow the detection of the time when a person comes into close proximity with the fixture, as is illustrated by the sensor path 22 shown by broken lines in Figure 2. It should also be appreciated that the sensors can be positioned in any appropriate position on the fixture or adjacent to the same to provide the required detection. In one embodiment the sensors are positioned and controlled to detect a person, for example, the torso of the person, and thereby minimise false detections. In one example the sensors can be angled downwardly from a position above the average persons torso position when using a fixture.

The sensor path or detection area is such that, when detected, the person is presumed with a high degree of certainty to be using the fixture and, with the positioning of the display screens as shown, to be watching the display screen. The sensors can also be provided to detect when the person leaves the vicinity of the fixture so that data indicating the start, end and duration of each use can be stored in storage means.

The sensors can in one embodiment be connected to software which modifies the way they react so that they recognise a person using the fixture and the sensors can reset automatically immediately a user has left the fixture so that the next 'hit' can be recorded for advertisers or other interested parties.

If audio data is to be generated, suitable speakers can be provided as part of the facility or within the area.

The system for downloading the data can take any suitable form, one being a low maintenance MPEG2 decoder. The hardware can be based on a standard PC with suitable processing means.

The Video data can be output in Composite, SVHS and RGB as an option and the system software can be loaded from a single storage means. The system can be configured to run from a sensor trigger or constant play.

Figure 3 illustrates an alternative embodiment to those of Figures 1 and 2 of the invention and which may be used with or without display screens (not shown), wherein there is provided a male urinal fixture 102 with two bays 104, 106. In the embodiment shown each of the bays is provided with a sensor 108 mounted on the respective walls 110, 112 of the bays 104, 106. The sensors in this embodiment can be provided to react to the impact of urine thereon and thereby cause a signal to be sent. The signal can be used to cause a change in condition of other apparatus for the display of material to the user and/or can, in this aspect, be used to provide a record of the level of usage of the urinal fixture..

The usage information can be of value to organisations who may advertise material at the fixture or in the area of the fixture and indicates to them the persons who are viewing the adverts and the times and peak times of viewing. Thus in whichever embodiment, it should be appreciated that the sensor can be provided as part of the fixture, or separate therefrom but in any case the sensor system used which includes sensors located to detect the presence of a person in the vicinity of the fixture.

Referring now to Figure 4 there is illustrated two side by side urinal or toilet fixtures in the form of two cubicles, with the views from

the rear of the cubicles, each of which comprises a cubicle 202 having side walls 210 and a door 212, with a toilet seat 204, a housing 205 with a display screen 206, and a sensor 208. The sensor in this case can be a light activated sensor mounted in the display screen housing as shown or could be a pressure sensor 208 mounted in the toilet seat annular part 210 as shown in Figure 5 which, when a person sits on the seat changes condition. However it should be noted that the sensor used can be any suitable sensor to allow the presence of a person to be detected. Thus when the person is detected the display of material from the display screen commences for the duration of the person sitting on the toilet seat and hence being able to view the display screen.

Although not shown in the drawings, it should be appreciated that the invention can be incorporated in any urinal or toilet facility fixture such as for example as part of a mirror assembly and/or at the location of a sink or a bank of sinks, whereupon the presence of a person at the sink and/or the presence of a person using a water tap at the sink can be sensed and, in addition to the presence of the person being logged and stored for reference as described above with reference to the other embodiments, the detection can cause the commencement of operation or change in condition of a display screen mounted for viewing by the person at the fixture.

In a yet further feature of the invention in a urinal or toilet facility there can be provided a number of fixtures which include a display screen and/or sensor system as herein described which are provided to allow the display of material at the said fixtures. Thus, for example, a person may use the male urinal or toilet seat fixture and view material on a display screen while using that fixture, then move to the sink to wash their hands and view material while using the second fixture on a display screen and then move to dry their hands with an automatic hand dryer and view material on a screen

while using that fixture. The screen viewed may be the same in all three cases or may be two or three separate screens depending on the positioning of the fixtures and whether the person could view the same. Furthermore the activation of the material can be by sensors mounted to detect the presence of a person at the respective fixtures.

In each embodiment the sensor can be connected to a control system (not shown), such that when the change in condition of the sensor occurs, this is logged on the control system so that an indication can be provided of the number of users of the fixtures over any given time period and, if required the length of use by each user or users by detecting when the person leaves the fixture. The change in condition of the sensors can also be used to activate the display of material on the display screen for the duration of the change in condition or until the sensor again changes condition.

This data with regard to usage is of great value to advertisers whose material may be displayed via the video and audio material which is generated. Furthermore the data is of great value as it provides an accurate indication of the person having viewed the material as when the person is using the fixture they cannot leave the fixture and, more importantly with the proper positioning of the display screens it is very difficult for the person to do anything else but view the material displayed to them. Thus the data can be assumed to have a relatively high degree of accuracy inasmuch that those people whose presence has been detected can be assumed with a high degree of certainty to have viewed the video material. From this, the levels and times of usage can be cross referenced with respect to the times of showing of particular advertising material and so peaks and troughs of usage in terms of time can be calculated and cross referenced with specific advertisers. The data can thus be sold on to the advertisers as of course can the

advertising space so that revenue can be obtained through the invention in addition to providing the opportunity to provide entertainment and information to the users of the facility.

In a further feature of the invention the data which is detected by the sensors can be transmitted to a remote location from the facility or from storage means connected to the sensor in the facility. In one embodiment the data is transmitted by uploading the same using transmission means which can also be used for the downloading of video and/or audio data relating to new advertising, entertainment and/or information material for display. The data received by the upload can be installed into a secure web site which advertisers or facility managers or other interested parties who may have paid for the data can access and 'track' the level of use of the fixtures in the facility and hence in the case of advertisers exposure to their advertising material.

Typically the advertising material will be downloaded to storage medium which can be any desired form such as a 'flash disk' which is a form of storage disk and from which the material can be generated on screen continuously or as required. The same storage medium can also be used to store the 'real-time' data about number, frequency and time of uses and this data can be retrieved by the remote connection discussed above or by visiting the facility. This "usage" data is of great value and can be a unique service to advertising companies and their advertisers and is a feature which is not currently available.

The downloading of the data can be achieved using any suitable system such as for example an internet based system however the increasing expansion of broadband communications both on landline based systems (ISDN, ADSL) and mobile based systems (GPRS, GSM, G3) allow moving images and Alphanumeric type communications to be transmitted

reliably at sufficient speed and data quality. The transmission of the data may be implemented with the use of Remote Writer software or any other suitable control and implementation system which is commercially available.

Thus there is provided the provision in a urinal or toilet facility of a display screen with the display screen positioned and used to display a material to the user of a fixture in the facility such as a male urinal, toilet seat, sink, mirror or any other fixture and this in itself is a useful and inventive feature in that the display screen is positioned to allow video material to be viewed by the person using the fixture. However the utility is further improved by the use of a sensor to detect the presence of a person at the fixture. In addition, data relating to the usage of the fixture and when used in conjunction with the display screen exposure to the material displayed on the display screen can be stored and provided to advertisers to whom the material relates, facility providers or other interested parties. Furthermore the data from which the video and/or audio via speakers, is generated can be downloaded to the facility from a remote location and stored in memory via suitable communication systems.

Claims

1. A toilet or urinal facility, wherein said facility includes a screen for the display of video data and/or speakers for audio data, which screen is positioned so as to be viewed by a person when using at least one fixture in the facility and a sensor is provided to detect the presence of a person in said facility.

2 A facility according to claim 1 wherein the screen is mounted at a position removed from the fixture or as an integral part of the fixture.

3 A facility according to claim 2 wherein when mounted separately from the fixture the display screen is provided in a housing.

4 A facility according to claim 1 wherein the fixture is a urinal fixture which has a urine collection area leading to a drain and, depending upwardly from the collection area, a wall.

5 A facility according to claim 4 wherein the fixture has a number of bays for a number of users, and is provided with a display screen for each bay or a common screen.

6 A facility according to claim 1 wherein the video and/or audio data is supplied from a storage medium located at or connected to the apparatus in the facility.

7 A facility according to claim 6 wherein the material to be displayed is transmitted to the storage medium from a remote location.

8 A facility according to claim 1 wherein said sensor is arranged to detect the presence of a user of the fixture and a storage means is

provided to allow the storage of data generated from the sensor which indicates the number of detections made over a time period to indicate usage of the fixture.

9 A facility according to claim 8 wherein the data from the sensor is transmitted from the storage means to a remote location for subsequent processing and analysis.

10 A facility according to claim 1 wherein activation of the sensor causes activation of the video and/or audio material or a change in condition of the video and/or audio material.

11 A facility according to claim 1 wherein the sensor is mounted at or adjacent to the display screen.

12 A facility according to claim 1 wherein the facility incorporates a toilet seat fixture, and the sensor is mounted in the housing in which the display screen is provided to detect the presence of a person on said seat.

13 A facility according to claim 1 wherein the facility incorporates a toilet seat fixture and said seat has mounted in the same a sensor, said sensor activated by the presence of a person on said seat or in the vicinity of the same.

14 A facility according to claim 1 wherein the sensor is mounted on the fixture to indicate a change in condition of the fixture by reacting to a specified liquid or liquids.

15 A facility according to claim 14 wherein the sensor is controlled to react to urine but not water so as to avoid activation during the flushing process of a male urinal fixture or toilet seat fixture.

16 A facility according to claim 14 wherein the sensor is a conductive sensor and the sensitivity of the same is adjusted to allow the same to react with respect to the particular conductivity of the liquid.

17 A facility according to claim 1 wherein the facility incorporates a sink fixture and the sensor is provided to detect the presence of a person at the sink and the screen is positioned to be viewable by a person at the sink.

18 A facility according to claim 17 wherein the sensor is provided to detect the use of the water taps of the sink.

19 A facility according to claim 1 wherein the screen and/or sensor are incorporated in a mirror in the facility.

20 A toilet or urinal facility provided with at least one fixture for use by a person and wherein there is provided a display screen mounted for viewing by the person when using the fixture.

21 A facility according to claim 20 wherein the display is activated or the condition of the video material is changed in response to the insertion of a coin, token, or card into apparatus in connection with the display screen or via the activation of a sensor by the presence of a person using the fixture.

22 A facility according to claim 20 wherein upon activation of the facility the user can participate in a game.

23 A toilet or urinal facility, wherein said facility includes at least one fixture for use by a person, and the presence of persons using said fixture is detected by a sensor mounted on the fixture or in a position to detect the presence of a person at said fixture and said

sensor data indicative of the persons presence is stored in memory means.

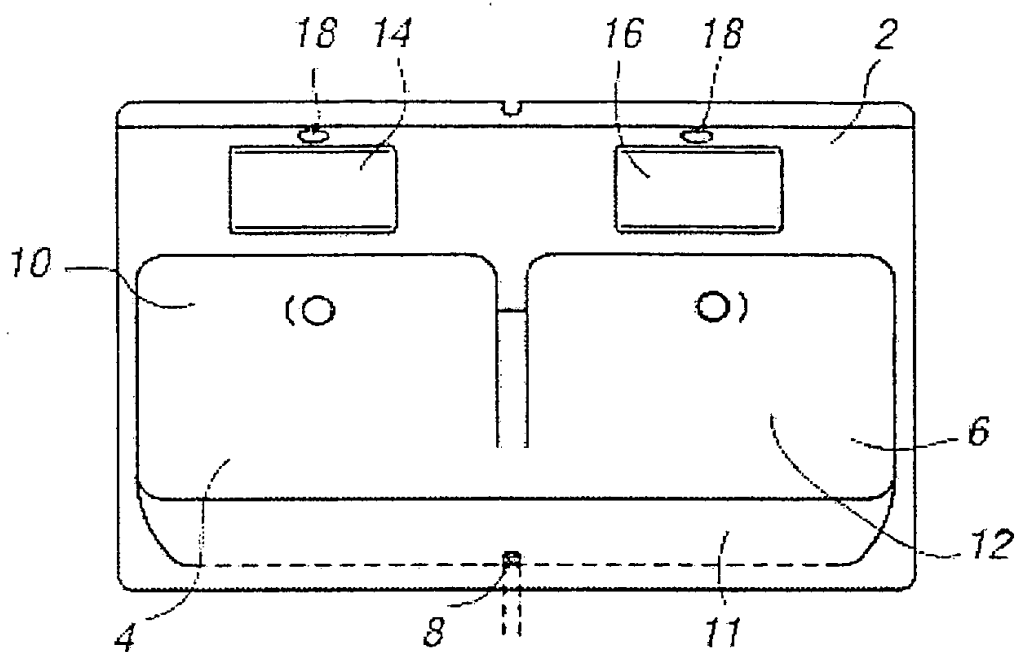


FIG. 1

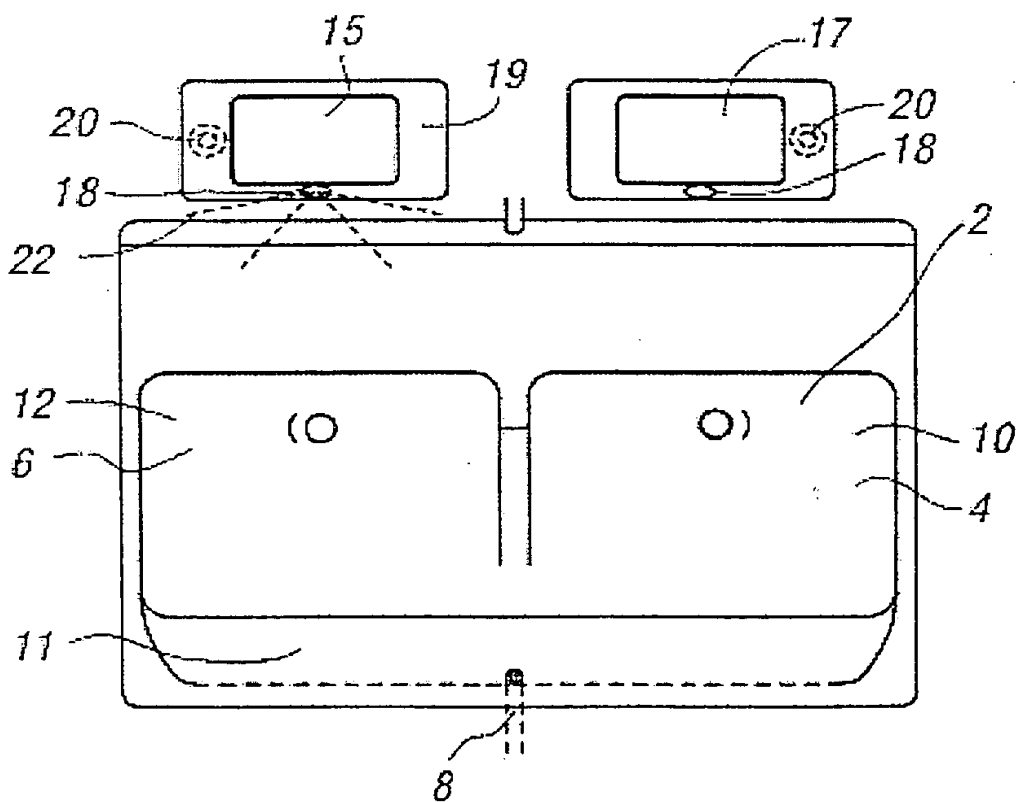
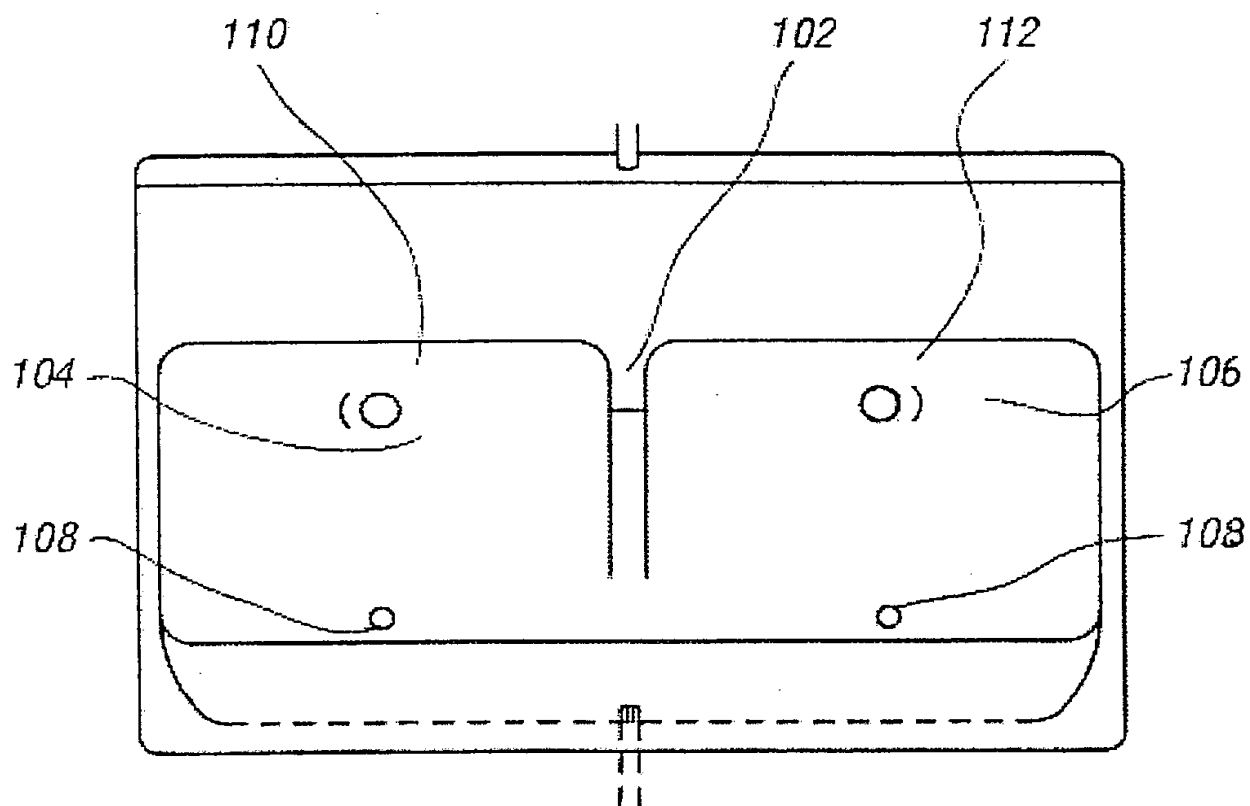


FIG. 2

FIG. 3

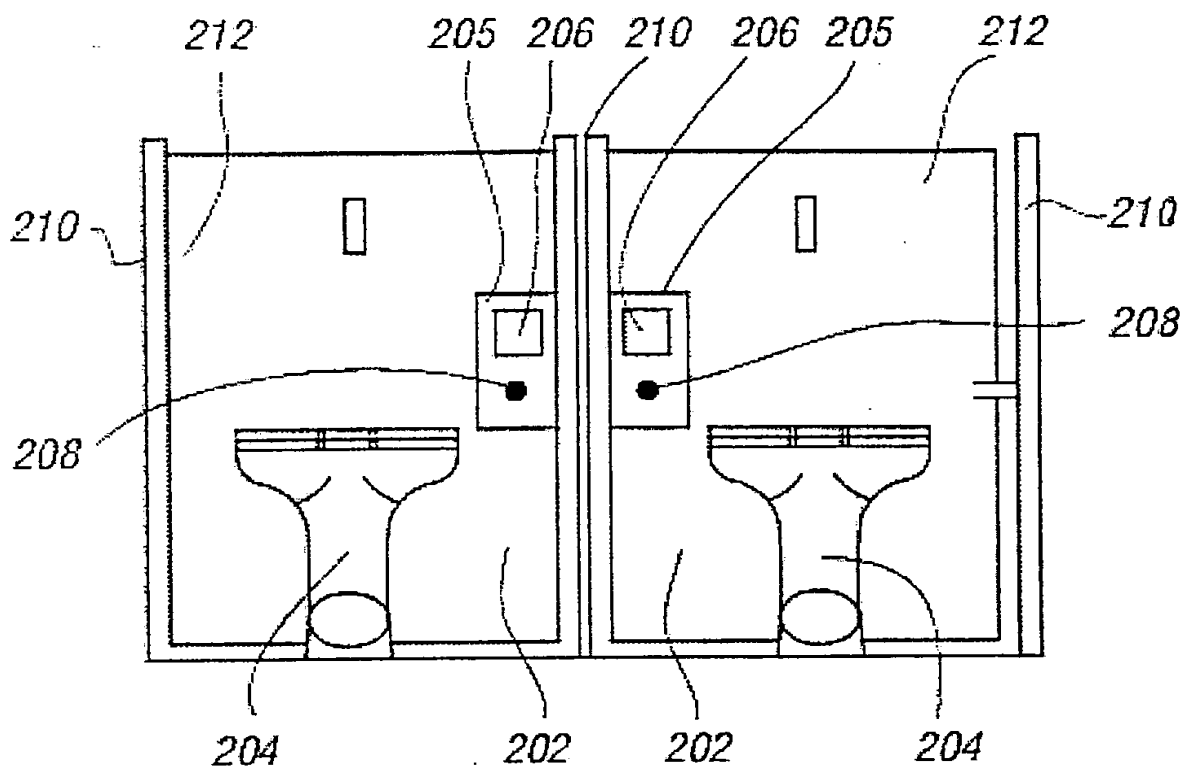


FIG. 4

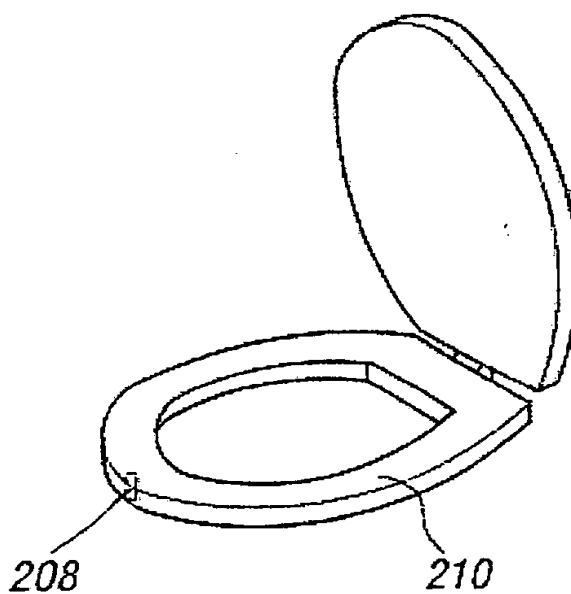


FIG. 5

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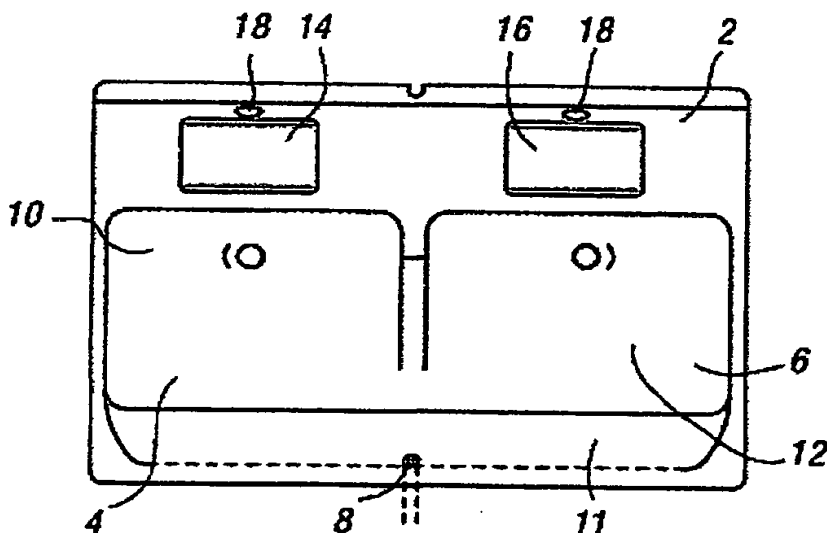
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Published:

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: URINAL OR TOILET FACILITY APPARATUS



(57) Abstract: The invention relates to the provision in a urinal or toilet facility of a display screen with the display screen positioned and used to display video material to the user of a fixture in the facility such as a male urinal, toilet seat, sink, mirror or any other fixture and this in itself is a useful and inventive feature in that the display screen is positioned to allow video material to be viewed by the person using the fixture. However the utility is further improved by the use of a sensor to detect the presence of a person at the fixture. In addition, data relating to the usage of the fixture and when used in conjunction with the display screen exposure to the material displayed on the display screen can be stored and provided to advertisers to whom the material relates, facility providers or other interested parties. Furthermore the data from which the video and/or audio via speakers, is generated can be downloaded to the facility from a remote location and stored in memory via suitable communication systems.

WO 01/18315 A1

PATENT COOPERATION TREATY

8547-PCT

From the INTERNATIONAL SEARCHING AUTHORITY

PCT

NOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL SEARCH REPORT
OR THE DECLARATION

(PCT Rule 44.1)

To:
BAILEY WALSH & CO.
5 York Place
Leeds LS1 2SD
UNITED KINGDOM

Date of mailing
(day/month/year) 20/11/2000

Applicant's or agent's file reference
GW-8213-GB

FOR FURTHER ACTION See paragraphs 1 and 4 below

International application No.
PCT/GB 00/03418

International filing date
(day/month/year) 06/09/2000

Applicant

THE OLD VICARAGE

1. ☒ The applicant is hereby notified that the International Search Report has been established and is transmitted herewith.

Filing of amendments and statement under Article 19:

The applicant is entitled, if he so wishes, to amend the claims of the International Application (see Rule 46):

When? The time limit for filing such amendments is normally 2 months from the date of transmittal of the International Search Report; however, for more details, see the notes on the accompanying sheet.

Where? Directly to the International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland
Facsimile No.: (41-22) 740.14.35

20 NOV 2000

For more detailed instructions, see the notes on the accompanying sheet.

2. ☐ The applicant is hereby notified that no International Search Report will be established and that the declaration under Article 17(2)(a) to that effect is transmitted herewith.

3. ☐ With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:

☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.

☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. **Further action(s):** The applicant is reminded of the following:

Shortly after **18 months** from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90bis.1 and 90bis.3, respectively, before the completion of the technical preparations for international publication.

Within **19 months** from the priority date, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later).

Within **20 months** from the priority date, the applicant must perform the prescribed acts for entry into the national phase before all designated Offices which have not been elected in the demand or in a later election within 19 months from the priority date or could not be elected because they are not bound by Chapter II.

Name and mailing address of the International Searching Authority



European Patent Office, P.B. 5818 Patentlaan 2
NL-2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Gregory Adam

NOTES TO FORM PCT/ISA/220

These Notes are intended to give the basic instructions concerning the filing of amendments under article 19. The Notes are based on the requirements of the Patent Cooperation Treaty, the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the PCT Applicant's Guide, a publication of WIPO.

In these Notes, "Article", "Rule", and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions respectively.

INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international publication. Furthermore, it should be emphasized that provisional protection is available in some States only.

What parts of the international application may be amended?

Under Article 19, only the claims may be amended.

During the international phase, the claims may also be amended (or further amended) under Article 34 before the International Preliminary Examining Authority. The description and drawings may only be amended under Article 34 before the International Examining Authority.

Upon entry into the national phase, all parts of the international application may be amended under Article 28 or, where applicable, Article 41.

When?

Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

Where not to file the amendments?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a demand for international preliminary examination has been/is filed, see below.

How?

Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Section 205(b)).

The amendments must be made in the language in which the international application is to be published.

What documents must/may accompany the amendments?

Letter (Section 205(b)):

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confused with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must be in English or French, at the choice of the applicant. However, if the language of the international application is English, the letter must be in English; if the language of the international application is French, the letter must be in French.

NOTES TO FORM PCT/ISA/220 (continued)

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

- (i) the claim is unchanged;
- (ii) the claim is cancelled;
- (iii) the claim is new;
- (iv) the claim replaces one or more claims as filed;
- (v) the claim is the result of the division of a claim as filed.

The following examples illustrate the manner in which amendments must be explained in the accompanying letter:

1. [Where originally there were 48 claims and after amendment of some claims there are 51]:
"Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers; claims 30, 33 and 36 unchanged; new claims 49 to 51 added."
2. [Where originally there were 15 claims and after amendment of all claims there are 11]:
"Claims 1 to 15 replaced by amended claims 1 to 11."
3. [Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims]:
"Claims 1 to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added." or
"Claims 7 to 13 cancelled; new claims 15, 16 and 17 added; all other claims unchanged."
4. [Where various kinds of amendments are made]:
"Claims 1-10 unchanged; claims 11 to 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claim 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added."

"Statement under article 19(1)" (Rule 46.4)

The amendments may be accompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings (which cannot be amended under Article 19(1)).

The statement will be published with the international application and the amended claims.

It must be in the language in which the international application is to be published.

It must be brief, not exceeding 500 words if in English or if translated into English.

It should not be confused with and does not replace the letter indicating the differences between the claims as filed and as amended. It must be filed on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)."

It may not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

Consequence if a demand for international preliminary examination has already been filed

If, at the time of filing any amendments under Article 19, a demand for international preliminary examination has already been submitted, the applicant must preferably, at the same time of filing the amendments with the International Bureau, also file a copy of such amendments with the International Preliminary Examining Authority (see Rule 62.2(a), first sentence).

Consequence with regard to translation of the international application for entry into the national phase

The applicant's attention is drawn to the fact that, where upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/elected Offices, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see Volume II of the PCT Applicant's Guide.

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference GW-8213-GB	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/GB 00/ 03418	International filing date (day/month/year) 06/09/2000	(Earliest) Priority Date (day/month/year) 09/09/1999
Applicant THE OLD VICARAGE		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☐ as suggested by the applicant.

☒ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

1
☐ . None of the figures.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/CB. 00/03418

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 29811821 U	17-09-1998	DE 29815011 U	22-10-1998
US 4773863 A	27-09-1988	GB 2223164 A,B	04-04-1990
DE 19726413 A	07-01-1999	NONE	
WO 0003099 A	20-01-2000	AU 4525999 A	01-02-2000
JP 2000139777 A	23-05-2000	NONE	
FR 2703499 A	07-10-1994	NONE	

12/00

01-01

01-01

PCT

REQUEST

The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty.

For receiving Office use only

International Application No.

International Filing Date

Name of receiving Office and "PCT International Application"

Applicant's or agent's file reference
(if desired) (12 characters maximum)

GW-8213-GB

Box No. I TITLE OF INVENTION

URINAL OR TOILET FACILITY APPARATUS

Box No. II APPLICANT

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

SYKES John:
The Old Vicarage
Scalby
Scarborough, N. Yorkshire
YO13 0RP

☒ This person is also inventor.

Telephone No.

Facsimile No.

Teleprinter No.

State (that is, country) of nationality:

G. B

State (that is, country) of residence:

G. B

This person is applicant
for the purposes of:



all designated
States



all designated States except
the United States of America



the United States
of America only



the States indicated in
the Supplemental Box

Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

This person is:

☐ applicant only

☐ applicant and inventor

☐ inventor only (If this check-box
is marked, do not fill in below.)

State (that is, country) of nationality:

State (that is, country) of residence:

This person is applicant
for the purposes of:



all designated
States



all designated States except
the United States of America



the United States
of America only



the States indicated in
the Supplemental Box

☐ Further applicants and/or (further) inventors are indicated on a continuation sheet.

Box No. IV AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE

The person identified below is hereby/has been appointed to act on behalf
of the applicant(s) before the competent International Authorities as:



agent



common representative

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)

Bailey Walsh & Co
5 York Place
Leeds
LS1 2SD

Telephone No.

+44(0)113 2433824

Facsimile No.

+44(0)113 2445699

Teleprinter No.

☐ Address for correspondence: Mark this check-box where no agent or common representative is/has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.

Box No. V DESIGNATION OF STATES

The following designations are hereby made under Rule 4.9(a) (mark the applicable check-boxes; at least one must be marked):


Regional Patent

- ☒ AP ARIPO Patent: GH Ghana, GM Gambia, KE Kenya, LS Lesotho, MW Malawi, MZ Mozambique, SD Sudan, SL Sierra Leone, SZ Swaziland, TZ United Republic of Tanzania, UG Uganda, ZW Zimbabwe, and any other State which is a Contracting State of the Harare Protocol and of the PCT
- ☒ EA Eurasian Patent: AM Armenia, AZ Azerbaijan, BY Belarus, KG Kyrgyzstan, KZ Kazakhstan, MD Republic of Moldova, RU Russian Federation, TJ Tajikistan, TM Turkmenistan, and any other State which is a Contracting State of the Eurasian Patent Convention and of the PCT
- ☒ EP European Patent: AT Austria, BE Belgium, CH and LI Switzerland and Liechtenstein, CY Cyprus, DE Germany, DK Denmark, ES Spain, FI Finland, FR France, GB United Kingdom, GR Greece, IE Ireland, IT Italy, LU Luxembourg, MC Monaco, NL Netherlands, PT Portugal, SE Sweden, and any other State which is a Contracting State of the European Patent Convention and of the PCT
- ☒ OA OAPI Patent: BF Burkina Faso, BJ Benin, CF Central African Republic, CG Congo, CI Côte d'Ivoire, CM Cameroon, GA Gabon, GN Guinea, GW Guinea-Bissau, ML Mali, MR Mauritania, NE Niger, SN Senegal, TD Chad, TG Togo, and any other State which is a member State of OAPI and a Contracting State of the PCT (if other kind of protection or treatment desired, specify on dotted line)

National Patent (if other kind of protection or treatment desired, specify on dotted line):

- | | |
|--|--|
| <input checked="" type="checkbox"/> AE United Arab Emirates | <input checked="" type="checkbox"/> LC Saint Lucia |
| <input checked="" type="checkbox"/> AG Antigua and Barbuda | <input checked="" type="checkbox"/> LK Sri Lanka |
| <input checked="" type="checkbox"/> AL Albania | <input checked="" type="checkbox"/> LR Liberia |
| <input checked="" type="checkbox"/> AM Armenia | <input checked="" type="checkbox"/> LS Lesotho |
| <input checked="" type="checkbox"/> AT Austria | <input checked="" type="checkbox"/> LT Lithuania |
| <input checked="" type="checkbox"/> AU Australia | <input checked="" type="checkbox"/> LU Luxembourg |
| <input checked="" type="checkbox"/> AZ Azerbaijan | <input checked="" type="checkbox"/> LV Latvia |
| <input checked="" type="checkbox"/> BA Bosnia and Herzegovina | <input checked="" type="checkbox"/> MA Morocco |
| <input checked="" type="checkbox"/> BB Barbados | <input checked="" type="checkbox"/> MD Republic of Moldova |
| <input checked="" type="checkbox"/> BG Bulgaria | <input checked="" type="checkbox"/> MG Madagascar |
| <input checked="" type="checkbox"/> BR Brazil | <input checked="" type="checkbox"/> MK The former Yugoslav Republic of Macedonia |
| <input checked="" type="checkbox"/> BY Belarus | <input checked="" type="checkbox"/> MN Mongolia |
| <input checked="" type="checkbox"/> BZ Belize | <input checked="" type="checkbox"/> MW Malawi |
| <input checked="" type="checkbox"/> CA Canada | <input checked="" type="checkbox"/> MX Mexico |
| <input checked="" type="checkbox"/> CH and LI Switzerland and Liechtenstein | <input checked="" type="checkbox"/> MZ Mozambique |
| <input checked="" type="checkbox"/> CN China | <input checked="" type="checkbox"/> NO Norway |
| <input checked="" type="checkbox"/> CR Costa Rica | <input checked="" type="checkbox"/> NZ New Zealand |
| <input checked="" type="checkbox"/> CU Cuba | <input checked="" type="checkbox"/> PL Poland |
| <input checked="" type="checkbox"/> CZ Czech Republic | <input checked="" type="checkbox"/> PT Portugal |
| <input checked="" type="checkbox"/> DE Germany | <input checked="" type="checkbox"/> RO Romania |
| <input checked="" type="checkbox"/> DK Denmark | <input checked="" type="checkbox"/> RU Russian Federation |
| <input checked="" type="checkbox"/> DM Dominica | <input checked="" type="checkbox"/> SD Sudan |
| <input checked="" type="checkbox"/> DZ Algeria | <input checked="" type="checkbox"/> SE Sweden |
| <input checked="" type="checkbox"/> EE Estonia | <input checked="" type="checkbox"/> SG Singapore |
| <input checked="" type="checkbox"/> ES Spain | <input checked="" type="checkbox"/> SI Slovenia |
| <input checked="" type="checkbox"/> FI Finland | <input checked="" type="checkbox"/> SK Slovakia |
| <input checked="" type="checkbox"/> GB United Kingdom | <input checked="" type="checkbox"/> SL Sierra Leone |
| <input checked="" type="checkbox"/> GD Grenada | <input checked="" type="checkbox"/> TJ Tajikistan |
| <input checked="" type="checkbox"/> GE Georgia | <input checked="" type="checkbox"/> TM Turkmenistan |
| <input checked="" type="checkbox"/> GH Ghana | <input checked="" type="checkbox"/> TR Turkey |
| <input checked="" type="checkbox"/> GM Gambia | <input checked="" type="checkbox"/> TT Trinidad and Tobago |
| <input checked="" type="checkbox"/> HR Croatia | <input checked="" type="checkbox"/> TZ United Republic of Tanzania |
| <input checked="" type="checkbox"/> HU Hungary | <input checked="" type="checkbox"/> UA Ukraine |
| <input checked="" type="checkbox"/> ID Indonesia | <input checked="" type="checkbox"/> UG Uganda |
| <input checked="" type="checkbox"/> IL Israel | <input checked="" type="checkbox"/> US United States of America |
| <input checked="" type="checkbox"/> IN India | <input checked="" type="checkbox"/> UZ Uzbekistan |
| <input checked="" type="checkbox"/> IS Iceland | <input checked="" type="checkbox"/> VN Viet Nam |
| <input checked="" type="checkbox"/> JP Japan | <input checked="" type="checkbox"/> YU Yugoslavia |
| <input checked="" type="checkbox"/> KE Kenya | <input checked="" type="checkbox"/> ZA South Africa |
| <input checked="" type="checkbox"/> KG Kyrgyzstan | <input checked="" type="checkbox"/> ZW Zimbabwe |
| <input checked="" type="checkbox"/> KP Democratic People's Republic of Korea | Check-box reserved for designating States which have become party to the PCT after issuance of this sheet: |
| <input checked="" type="checkbox"/> KR Republic of Korea | <input type="checkbox"/> |
| <input checked="" type="checkbox"/> KZ Kazakhstan | |

Precautionary Designation Statement: In addition to the designations made above, the applicant also makes under Rule 4.9(b) all other designations which would be permitted under the PCT except any designation(s) indicated in the Supplemental Box as being excluded from the scope of this statement. The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit. (Confirmation (including fees) must reach the receiving Office within the 15-month time limit.)

Box No. VI PRIORITY CLAIM		<input type="checkbox"/> Further priority claims as indicated in the Supplemental Box.		
Filing date of earlier application (day/month/year)	Number of earlier application	Where earlier application is:		
		national application: country	regional application: regional Office	international application: receiving Office
item (1) 09-09-99	9921192.2	G. B		
item (2) 05-10-99	9923396.7	G. B		
item (3)				
<input type="checkbox"/> The receiving Office is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) (only if the earlier application was filed with the Office which for the purposes of the present international application is the receiving Office) identified above as item(s):				
* Where the earlier application is an ARIPO application, it is mandatory to indicate in the Supplemental Box at least one country party to the Paris Convention for the Protection of Industrial Property for which that earlier application was filed (Rule 4.10(b)(ii)). See Supplemental Box.				
Box No. VII INTERNATIONAL SEARCHING AUTHORITY				
Choice of International Searching Authority (ISA) (if two or more International Searching Authorities are competent to carry out the international search, indicate the Authority chosen; the two-letter code may be used):		Request to use results of earlier search; reference to that search (if an earlier search has been carried out by or requested from the International Searching Authority):		
ISA /		Date (day/month/year)	Number	Country (or regional Office)
Box No. VIII CHECK LIST; LANGUAGE OF FILING				
This international application contains the following number of sheets: request : 3 description (excluding sequence listing part) : 14 claims : 4 abstract : 1 drawings : 3 sequence listing part of description : Total number of sheets : 25		This international application is accompanied by the item(s) marked below: 1. <input checked="" type="checkbox"/> fee calculation sheet 2. <input type="checkbox"/> separate signed power of attorney 3. <input checked="" type="checkbox"/> copy of general power of attorney; reference number, if any: 4. <input type="checkbox"/> statement explaining lack of signature 5. <input type="checkbox"/> priority document(s) identified in Box No. VI as item(s): 6. <input type="checkbox"/> translation of international application into (language): 7. <input type="checkbox"/> separate indications concerning deposited microorganism or other biological material 8. <input type="checkbox"/> nucleotide and/or amino acid sequence listing in computer readable form 9. <input checked="" type="checkbox"/> other (specify): cheque		
Figure of the drawings which should accompany the abstract:		Language of filing of the international application: English		
Box No. IX SIGNATURE OF APPLICANT OR AGENT				
Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the request).				
 BAILEY WALSH & CO (Agent)				

For receiving Office use only	
1. Date of actual receipt of the purported international application: 3. Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application: 4. Date of timely receipt of the required corrections under PCT Article 11(2): 5. International Searching Authority (if two or more are competent): ISA /	2. Drawings: <input type="checkbox"/> received: <input type="checkbox"/> not received: 6. <input type="checkbox"/> Transmittal of search copy delayed until search fee is paid.

For International Bureau use only
Date of receipt of the record copy by the International Bureau:

PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

PCT

NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL PRELIMINARY EXAMINATION REPORT (PCT Rule 71.1)

To:

BAILEY WALSH & CO.
5 York Place
Leeds LS1 2SD
GRANDE BRETAGNE

Date of mailing
(day/month/year) 05.11.2001

Applicant's or agent's file reference
GW-SAR-8457-PCT

IMPORTANT NOTIFICATION

International application No.
PCT/GB00/03418

International filing date (day/month/year)
06/09/2000

Priority date (day/month/year)
09/09/1999

Applicant
SYKES, John

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

- 7 NOV 2001

Name and mailing address of the IPEA/



European Patent Office
D-80298 Munich
Tel. +49 89 2399 - 0 Tx: 523656 epmu d
Fax: +49 89 2399 - 4465

Authorized officer

Di Salvo, F

Tel. +49 89 2399-7545



PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference GW-SAR-8457-PCT		FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/GB00/03418	International filing date (day/month/year) 06/09/2000	Priority date (day/month/year) 09/09/1999	
International Patent Classification (IPC) or national classification and IPC E03D13/00			
Applicant SYKES, John			

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.


2. This REPORT consists of a total of 8 sheets, including this cover sheet.

- ☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 20 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☒ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☒ Certain documents cited
- VII ☒ Certain defects in the international application
- VIII ☒ Certain observations on the international application

Date of submission of the demand 26/03/2001	Date of completion of this report 05.11.2001
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer Leher, V Telephone No. +49 89 2399 7352 